

GRACE S. BHUDHIKANOK

Parkinson's Institute • 675 Almanor Avenue • Sunnyvale, CA 94085 • graceb@theipi.org

EDUCATION

Stanford University

Stanford, CA

Ph.D. in Epidemiology, 01/2005.

Dissertation Projects:

Reproductive events in adolescence and peak bone density

Examines the effect on young adult bone density of adolescent live birth, breastfeeding, and use of oral contraceptives and Depo-Provera®. Retrospective cohort study of 301 black and 297 white women.

Bone mineral density in Asians and whites during adolescence and young adulthood

Compares bone mass, areal density, and estimated volumetric density across races, adjusting for known confounders such as sex, pubertal stage, body size, dietary calcium, and physical activity. Cross-sectional study of 100 Asians and 103 whites ages 9-25 years.

Reliability of autobiographical data

Examines the reliability of self-reported epidemiological data and explores two cognitive-psychology-based approaches to improve it. Randomized trial of 28 women and 32 men.

Harvard and Radcliffe Colleges

Cambridge, MA

A.B. *cum laude* in Biological Sciences, 06/1993.

Honors: Radcliffe National Scholar, Harvard College Scholar, Elizabeth Cary Agassiz Certificate of Merit, Dean's List, National Merit Scholar.

RELEVANT WORK EXPERIENCE

The Parkinson's Institute

Sunnyvale, CA

Staff scientist—epidemiologist. Involved in writing grant proposals, preparing talks, advising on analytic approaches, and cleaning, restructuring, and analyzing data from several ongoing clinical research studies seeking to identify the cause(s) of Parkinson's disease. (2005-present)

Stanford University

Stanford, CA

Doctoral researcher

Designed studies and directly collected or oversaw collection of data. Cleaned and analyzed data, and summarized results for publication. (1997-2004)

Statistical programming consultant

Devised and ran statistical analyses and summarized findings. Cleaned data and wrote SAS macros to streamline data extraction and analysis. Projects included an experimental drug trial in rabbits, a diet study, and a school-wide survey of graduate students. (2002-2004)

Editor

Newsletter: Edited the newsletter of a Stanford student group (2-3 issues per year). Also did desktop publishing. (2002-2007)

Graduate Student Handbook: Coordinated revisions among over 50 authors, proofread, laid out, and authored several sections of Stanford University's official handbook for graduate students. (2001)

Clinical researcher

Analyzed data and/or coordinated patient visits for studies of bone density in cystic fibrosis patients, youths of different ethnicities, and chronic asthmatics starting inhaled glucocorticoid treatment. Interviewer for a questionnaire validation study. Trained as bone densitometry technician. (1993-1997)

Genentech, Inc.**South San Francisco, CA**

Epidemiology consultant. Fact-checked and revised FDA submission on IgE and cancer in asthmatic and allergic populations. For National Cooperative Growth Study bone substudy, helped identify methodologic issues and write background and protocol. (2002 and 1999-2000)

California Department of Public Health, Environmental Health Investigations Branch**Emeryville, CA**

Senior Research Associate. Analyzed data for a study of health effects associated with environmental exposures arising from excavation of a Superfund site. Also helped plan and document analyses. (1996-1997)

Harvard School of Public Health**Boston, MA**

Undergraduate honors research. Conducted sleep studies, recording breathing patterns and examining correlations between measurements of wakefulness and of breathing (e.g., EEG, EOG, and end-tidal PCO₂) as people fell asleep and awoke. (1992-1993)

Children's Hospital of Los Angeles**Los Angeles, CA**

Research assistant fellowship. Compared quality of life under home mechanical ventilation versus under traditional hospital care for children with Central Hypoventilation Syndrome, chronic lung disease, and ventromuscular weakness. Included clinical experience, pulmonary function testing, and neuropathology dissections. (1991)

RELEVANT TEACHING EXPERIENCE**Stanford University School of Medicine****Stanford, CA***Teaching assistant*

Applied Epidemiological Analysis (HRP 223, graduate course): Graded homework, held office hours, debugged and gave personalized feedback on each student's SAS programming assignments. (2001)

Advanced Epidemiological Methods (HRP 226, graduate course): Graded homework and exams, held office hours, conducted review sessions, and helped write exam questions. (1997)

Harvard University Computer Services**Cambridge, MA**

User assistant. Taught hands-on seminars to college students and staff on computer operating systems and software. Wrote documentation. Answered questions about PCs, Macintoshes, and the VMS and Unix systems. (1990-1993)

Research Science Institute**Washington, D.C.**

Teaching assistant. Taught basic computer skills (e.g., word processing, spreadsheets, mathematical programs, electronic mail) at a highly selective math- and science-oriented summer residential program. Worked daily with 75 exceptionally bright high-school seniors. (1991)

RESEARCH PUBLICATIONS

Tanner CM, Ross GW, Jewell SA, Hauser RA, Jankovic J, Factor SA, Bressman S, Deligtisch A, Marras C, Lyons KE, Bhudhikanok GS, Roucoux DF, Meng C, Abbott RD, Langston JW. Occupation and risk of parkinsonism: a multicenter case-control study. *Arch Neurol* 2009; 66: 1106-13.

Bhudhikanok G, Kamel F, Umbach D, Korell M, Meng C, Hoppin J, Goldman S, Comyns K, Langston J, Sandler D, Blair A, Tanner C. Agreement for recall of past pesticide use after nine years is comparable to agreement after one year [abstract]. *Neuroepidemiology* 2007; 28: 123-124.

Goldman SM, Tanner CM, Oakes D, Bhudhikanok GS, Gupta A, Langston JW. Head injury and Parkinson's disease risk in twins. *Ann Neurol* 2006; 60: 65-72.

Bhudhikanok GS, Wang M-C, Marcus R, Harkins A, Moss RB, Bachrach LK. Bone acquisition and loss in children and adults with cystic fibrosis: a longitudinal study. *J Pediatrics* 1998; 133: 18-27.

Wang M-C, Aguirre M, Bhudhikanok GS, Kendall CG, Kirsch S, Marcus R, Bachrach LK. Bone mass and hip axis length in healthy Asian, black, Hispanic, and white American youths. *J Bone Miner Res* 1997; 12: 1922-1935.

Bhudhikanok GS, Wang M-C, Eckert K, Matkin C, Marcus R, Bachrach LK. Differences in bone density (BMD) in young Asian- and Caucasian-Americans may reflect differences in bone size. *J Bone Miner Res* 1996; 11: 1545-56.

Bhudhikanok GS, Lim J, Marcus R, Harkins A, Moss RB, Bachrach LK. Correlates of osteopenia in patients with cystic fibrosis. *Pediatrics* 1996; 97: 103-111.

Bhudhikanok GS, Palmer L, Marcus R, Bachrach LK. Comparison of bone mineral accretion in healthy Asian and Caucasian adolescents [abstract]. *J Bone Miner Res* 1994; 9: S270.

PEER REVIEWER

Pediatrics

Neurotoxicology

PLATFORM PRESENTATIONS

World Federation of Neurology, Neuroepidemiology. "Agreement for recall of past pesticide use after nine years is comparable to agreement after one year." Boston, MA, 2007.

INVITED TALKS

Green Tea Polyphenols Clinical Trial, Investigators' training meeting. "Good Clinical Practices." Beijing, China, 2006.

CCPDER Epidemiologic Working Group, Sunnyvale, CA, 2005.

University of California at Berkeley, School of Public Health, Nutrition Program graduate seminars. "Peak bone mass and reproductive events during adolescence." Berkeley, CA, 2003, 2004.

Bay Area SAS Users Group, "Methodological Issues in Health Research." Brisbane, CA, 1999.